

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics

Calculus I

Quiz No. 5A

Thursday 6/8/2015

15 Minutes

Instructor: *Dr. Monjed H. Samuh*

Name:

Student ID:

Q1]... [5 points] Evaluate the following limit.

$$\lim_{x \rightarrow 1^+} \left(\frac{1}{x-1} - \frac{1}{\ln x} \right).$$

Q2]... **[5 points]** Let $f'(x) = \frac{(x-2)(x+4)}{(x+1)(x-3)}$, $x \neq -1, 3$.

1. What are the critical points of $f(x)$?

2. On what intervals is f increasing or decreasing?

GOOD LUCK